APCAM

The Alien Plant Control & Monitoring Database

A new Acronym brought to you by….

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Mahalo nui loa to….

- Haleakala National Park: **Dan McNulty-Huffman**, **Steve Anderson**, **Patti Welton** and **Bill Haus**

- Natural Resource Information Division/Biological Resources Management Division: **Judy Daniels**

- The NPS Exotic Plant Management Teams (EPMT's): **Curt Deuser**, **Tony Pernas**, **Todd Neel**, **Lisa Jameson**, **Luis Florez, Jeremy Gooding** and **Kyle Moyer**

- The NPS Biological Resources Management Division: **Linda Drees** and **Terry Cacek**

- Intermountain Region Support Office: **Pamela K. Benjamin**

- USGS/BRD @ Haleakala National Park: ~**Philip Thomas**

Purpose of APCAM

So many weeds… So little time…

Provide a uniform platform for:

- Recording
- Analyzing
- Mapping
- Reporting
- Exchanging weed inventory, monitoring and control data

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Products

- Consistent data and maps for Inventory & Monitoring of Weeds

- Standardized Reporting for EPMT's, Parks & Cooperators

- Facilitated Pesticide-Use Reporting

- Simplified Input into NPSpecies and the Taxonomic Module (TM)

Overview

- Designed/Managed in a collaboration between HALE, the EPMT's and NRID (I&M)

- Front End in Access 2000 (uh oh!!!!)

- Back End in Access 97

- Based on Database Template

- Federal Geographic Data Committee (FGDC) compliant

- Jives with the Integrated Pest Management System (IPMS) & NPSpecies/TM

Who are these Exotic Plant Management Teams anyway?

"SWAT" Teams hired specifically to control weeds in (or near) a group of specific parks.

       9 Teams Currently

+   7 More To Start next Year (~FY2003)

+   <u>1</u> More To Start this Year (~FY2004)

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From Paradox to Present
(an abridged History of APCAM)

- Originally a ~Paradox (v. 5) database with limited Spatial capabilities

- Ported into Access at HALE

- Applied Database Template; i.e. Added "LocationID" "EventID" elements at HALE

- Added new fields from other EPMT's

- EPMT's agreed on 'Core'/Extra Fields at APCAM Workshop

- Currently beta-testing with EPMT's

APCAM Workshops

- Held January 29-31 and May 20 - 24, 2002 in Fort Collins, CO

Purpose:

- To bring together the EPMT's in order to agree on what information is needed to "go into and come out of" the database

- Agree on 'Core Fields' (aka Required Fields)

- An excuse to Party, Ski and Snowboard!

Guilty Parties

Workshops are **Fun**!!!!

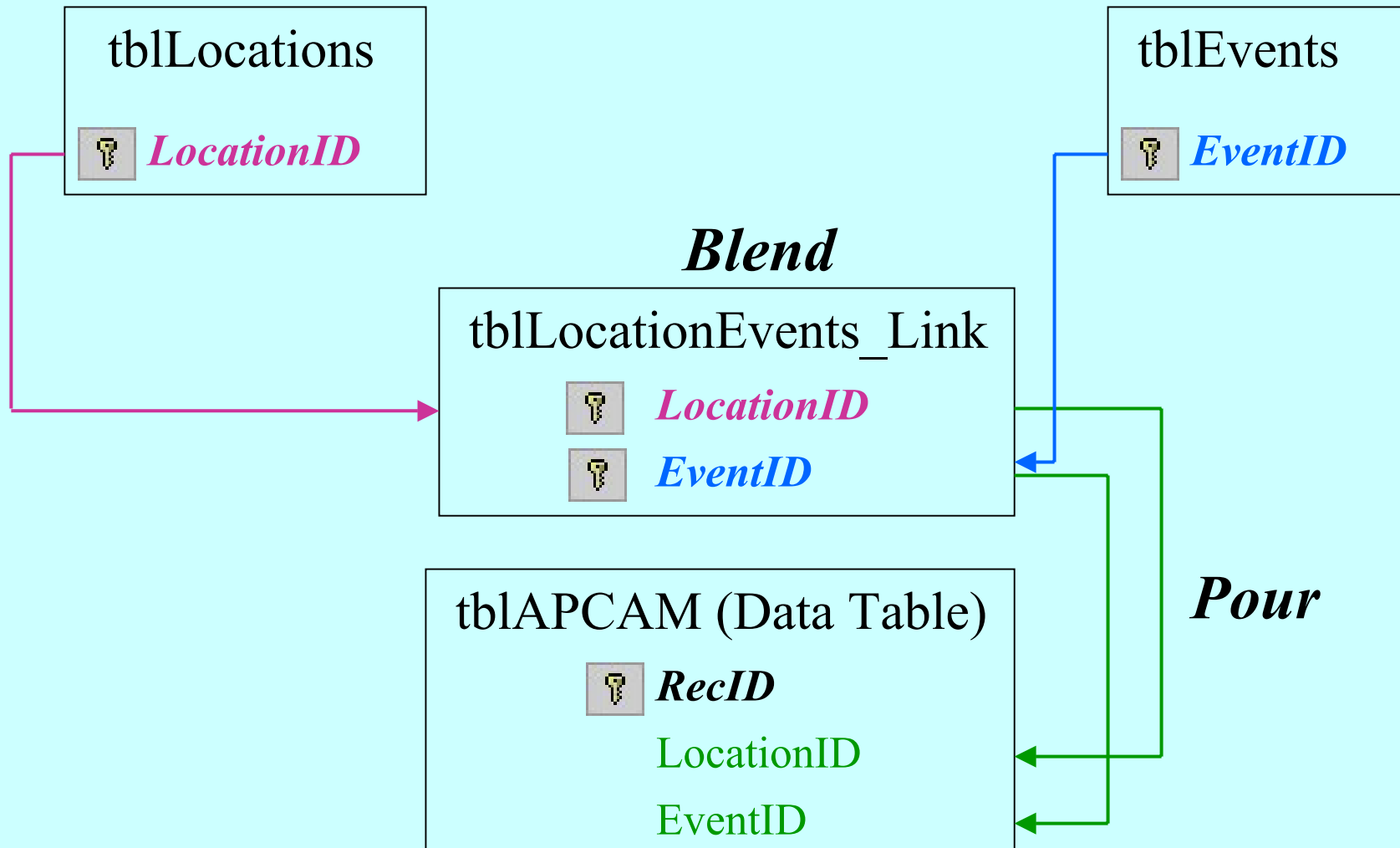# Why we used an Access 2000 Front End? (…as opposed to Access 97)

- All EPMT's are using Office 2000

- Can use >2 subforms

- Easier to Use and Develop

- Why not move ahead 3 years to 2 years ago?????

Why we used an Access 97 Back End?

- Still the NPS standard

- Access 2000 Front End can seamlessly link to data in Access 97 Back End

- Assisting parks and cooperators still using Access 97 can still access the Access data

- Low in Fat, High in Protein!!!

Table Relationships
(The Database Template Recipe)

tblLocations

🔑 *LocationID*

tblEvents

🔑 *EventID*

Blend

tblLocationEvents_Link

🔑 *LocationID*

🔑 *EventID*

Pour

tblAPCAM (Data Table)

🔑 *RecID*

LocationID

EventID

We recommend serving with a chilled full-body red wine

Is it FGDC compliant?

…Why **Yes**, thanks for asking!!!

- Meets the minimum FDGC standards (Sections 1 & 7)

Data Dictionary

Compliant with the fields:

- … outlined by the North American Weed Management Association (NAWMA)

- … outlined in the ***Weed Mapping and Database Development Guidelines for the National Park Service, Intermountain Region (IMR)*** by **Pamela K. Benjamin**, Intermountain Support Office

- …used by the Maui Invasive Species Committee and (soon to be) other Hawaii Cooperators

Species Lookup Table

List of Species from the (static but updateable) Access version of the Taxonomic Module (TM)

Table Name: **tblTaxonomicUnits**

Linking Field: **TSN** (Taxonomic Serial Number)

Field with Pick List Values: **FullLatinName**

*APCAM stores both **FullLatinName** and **TSN** in Table

Why link to the TM?

- NPSpecies also links to the TM

- Additions, updates, splits, lumps, synonyms, and other **fun** Nomenclature acrobatics are easily updated

- Ability to Add New Taxonomic Units

- It is lots of FUN!!!

Why **not** link directly to NPSpecies?
(…with all due respect to Simon/Mark)

- TM is the 'Master List' for NPSpecies

- Removes an extra 'layer' of linking

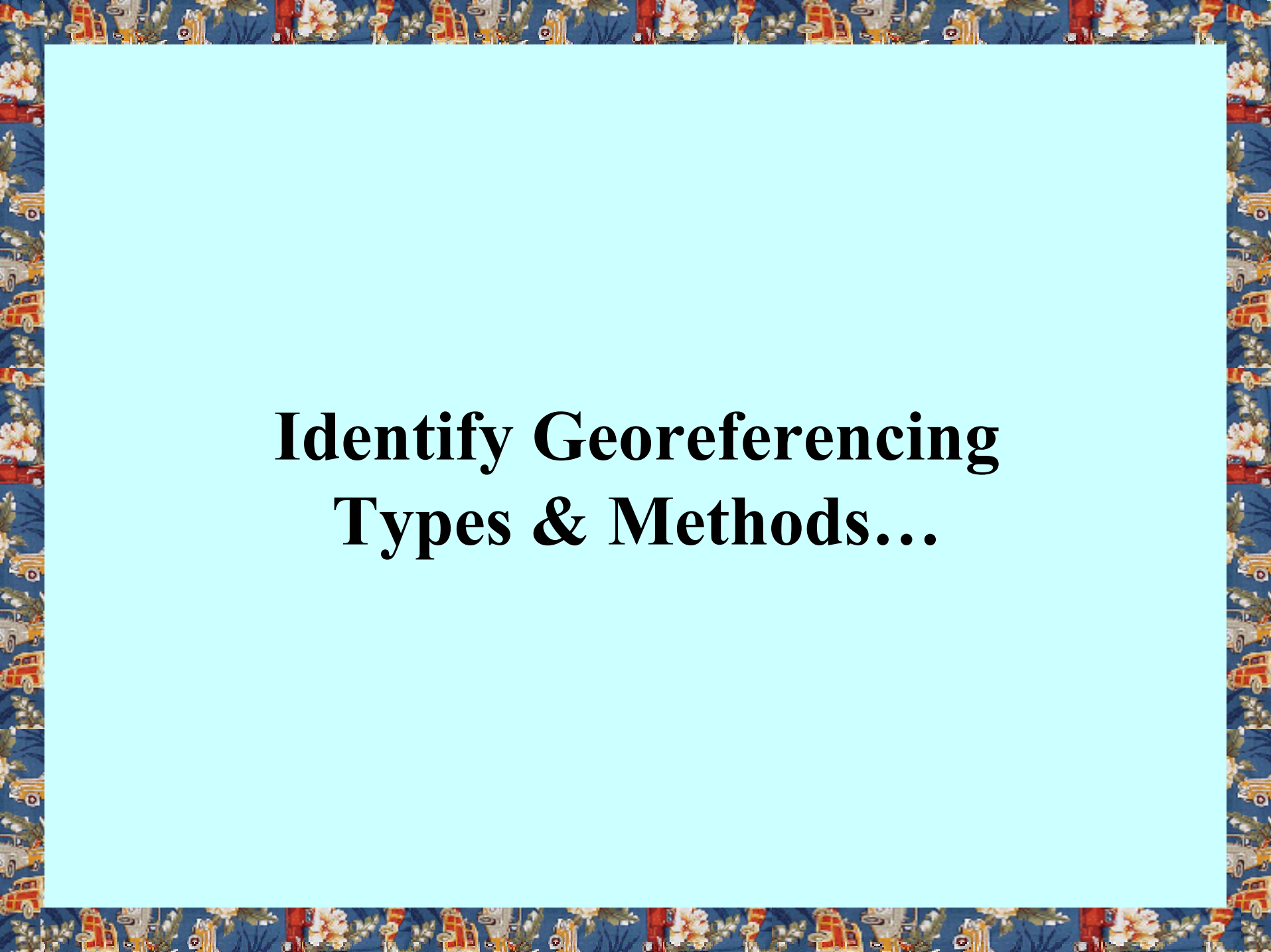- As EPMT's move to different parks, no need to 'relink' to a new NPSpecies

A Consideration/Decision…

Distinguish between LocationID's (& Species) that are…

- **In** the Park

- **Out** of the Park
  (but Encroaching/Threatening)

Another Consideration/Decision…

Identify Georeferencing Types & Methods…

Georeferencing Types
(the anatomy of 'GeoHow')

- **Current**

    How is the LocationID
    Currently Georeferenced?

    Field Name: **GeoHowCurrent**

- **Desired**

    (if Current is **not** so good…)
    How would you like the LocationID
    to be Georeferenced?

    Field Name: **GeoHowDesired**

Georeferencing Methods

- **Digitized From Paper**

- **Digitized On Screen**

- **GPS**

- **Grid System (62.5 m)**

- **Tax Map Key**

- **None**

Why Distinguish Between Georeferencing Types & Methods?

- There is Implied &/or Explicit **Accuracy** associated with each Method

- There is Implied &/or Explicit **Metadata** associated with each Method

- Can Generate a '**Laundry List**' of LocationID's that need Better Georeferencing (from **GeoHowDesired** field)

- Can Georeference '**Retro-Data**' that has not been Georeferenced

Confused??????

How about an example or 2…..

Example 1:

The LocationID is GPS'ed and that is good enough

Thus….

GeoHowCurrent = GPS

GeoHowDesired   = None

Example 2:

You accidentally left the GPS in the office or the GPS gets no reception. Later, back in the office, you Digitize the LocationID in ArcView. However, you want to try again the next time you visit the LocationID.

Thus….

GeoHowCurrent = DOS (Digitized On Screen)

GeoHowDesired   = GPS

What we would like to see….

- Change the NPS standard to Office 2000

- ArcView-to-Access Link for Access 2000

- Establish Protocols/Data Dictionaries for Plant (Native/Non-Native) Data Collection

- Establish Protocols/Data Dictionaries in all subject-matter areas on Data Collection

Any Questions/Demo?

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